

DEPARTMENT OF THE NAVY HEADQUARTERS UNITED STATES MARINE CORPS WASHINGTON, DC 20380-0001

MCO 1510.108 C 461M 27 Mar 96

MARINE CORPS ORDER 1510.108

From: Commandant of the Marine Corps

To: Distribution List

Subj: INDIVIDUAL TRAINING STANDARDS (ITS) SYSTEM FOR TACTICAL

REMOTE SENSOR SYSTEM (TRSS) MAINTAINER, MILITARY

OCCUPATIONAL SPECIALTY (MOS) 8631

Ref: (a) MCO 1510.34A

(b) MCO 1553.1B

(c) MCO 1553.2

(d) MCO 1553.3

Encl: (1) Components of an ITS

- (2) ITS Management
- (3) Index of Tasks by Training Location, Level of Training, Sustainment, and Grade to Standard
- (4) Common ITS Listing
- (5) Training Support
- (6) Individual Training Standards for TRSS Maintainer MOS 8631
- 1. Purpose. To publish the ITS System for MOS 8631.
- 2. <u>Cancellation</u>. None.

3. Background

- a. The references establish the system used to publish all training standards, provide policy, and assign responsibilities for applying the Systems Approach to Training (SAT).
- b. ITS's provide a common base of training for all Marines who have the same MOS. They provide the basis for the SAT of all individual training. ITS's are to be used by institutional and unit commanders to determine proficiency of individual Marines, to establish training plans and courses of instruction, and to maintain a progressive and systematic method to monitor training impacts on Individual Career Development Plans.
- c. ITS's are derived from Mission Performance Standards which come from combat requirements of the Fleet Marine Forces. Changes to doctrine, force structure, and the introduction of new weapons and equipment will require revision of this Order on a regular basis.

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4. Summary of revision. New Order.

5. <u>Information</u>

- a. ITS's are to be used by institutional and unit commanders to design, develop, conduct, and evaluate their individual training of Marines. Institutional commanders will derive Terminal Learning Objectives (TLO) and Enabling Learning Objectives (ELO) from the tasks and performance steps set forth herein. Task lists reported on Course Descriptive Data (CDD) submissions will consist of task titles contained in this Order. Unit commanders will use the tasks contained in this Order as the basis of individual training in their long range, short range, and near term training plans.
 - b. The ITS system for MOS 8631 contains the following:
 - (1) Enclosure (1) contains the components of an ITS.
- (2) Enclosure (2) sets forth the ITS management, as it relates to use and maintenance.
- (3) Enclosure (3) is an index of tasks by training location, level of training, sustainment, and grade to standard.
 - (4) Enclosure (4) does not apply to this MOS.
- (5) Enclosure (5) lists training support in four categories:
- (a) Appendix A, Training Devices, Simulators, and Training Aids.
 - (b) Appendix B, Training Equipment.
- (c) Appendix C, Ammunition, Explosives, and Pyrotechnics.
 - (d) Appendix D, Training Materials.
 - (6) Enclosure (6) lists ITS's for MOS 8631.

6. Action

- a. <u>Commanding General, Marine Corps Combat Development Command (MCCDC)</u>
- $\left(1\right)$ Ensure that all units and institutions are using this Order to train personnel to the standards required of their grade and MOS.

- (2) Ensure that the Marine Corps Institute (MCI) and the Training and Audiovisual Support Centers (TAVSC) provide standardized job aids and other training support requirements to facilitate training in units.
- (3) Review, revise, and manage the upkeep of this Order in coordination with FMF commanders, MOS/Occupational Field sponsors and with subject matter experts.
- (4) Ensure coordination occurs with the Commander, Marine Corps Systems Command (MARCORSYSCOM).
- b. <u>Commanding Generals of the Fleet Marine Forces and Supporting Establishment Commands; and Commanders of Separate Organizations not Commanded by a General Officer</u>
- (1) Use this Order to implement the SAT process for Tactical Remote Sensor System (TRSS) Maintainer training.
- (2) Establish managed on-the-job-training (MOJT) programs to train Marines using the tasks to form the basis of initial, sustainment, or refresher training proficiencies in units both for TRSS Maintainer and command training plans.
- 7. <u>Submission of Recommendations and Requirements</u>. Recommendations concerning the contents of this Order are invited. Submit recommendations for change and recommended training requirements to the Commanding General, MCCDC (C 461) via the appropriate chain of command.
- 8. <u>Mobilization</u>. All ITS's in this Order will remain in effect during mobilization.
- 9. <u>Reserve Applicability</u>. This Order is applicable to the Marine Corps Reserve.

B. B. KNUTSON, JR.

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COMPONENTS OF AN ITS

- 1. <u>General</u>. ITS's contain six components; task, condition(s), standard, performance steps, reference(s), and administrative instructions.
- 2. <u>Alphanumeric System</u>. Each ITS is identified by the MOS followed by a series of numbers which identify the Duty Area, and Task.
- a. The MOS is identified by four Arabic numbers. The four numbers are the ones assigned to the MOS in the MCO Pl200.7 (MOS Manual). For the Tactical Remote Sensor System (TRSS) Maintainer MOS, the numeric designators would be 8631.X.X.
- b. Duty areas are identified by ascending Arabic numerals and are numbered consecutively by MOS. The designator for the first duty area under MOS 8631 would be 8631.1.X.
- c. Tasks within a duty area are numbered consecutively. The first task under the first duty area of MOS 8631 is numbered 8631.1.1. The second task under the third duty area of MOS 8631 is numbered 8631.3.2, and so forth.

3. <u>ITS Components</u>

- a. <u>Task</u>. The task describes what a Marine has to do. It is a clearly stated, performance oriented action requiring a learned skill. Knowledge or enrichment topics which are required for the performance of a specific task are included in the administrative instructions. This type of information may very well comprise a separate class with its own TLO/ELO, but is not a separate task. At the end of each task there will be a rank noted. This rank is the grade at which the Marine should be able to perform that task to standard.
- b. <u>Condition(s)</u>. The conditions set forth the real world or wartime circumstances in which the tasks are to be performed. This element of an ITS underscores "realism" in training. When resources or safety requirements limit the conditions, this should be stated. It is important to understand that the conditions set forth in this Order are the minimum, and may be adjusted when applicable.
- c. <u>Standard</u>. A standard is inviolate. It is not guidance, but a very carefully worded statement which sets the proficiency level expected when the task is performed. The standard should summarize the performance steps.

- d. <u>Performance Steps</u>. There must be at least two performance steps for each task. Performance steps specify actions required to fulfill the proficiency established by the standard.
- e. <u>Reference(s)</u>. Reference(s) are doctrinal publications which provide the authority vested in the performance steps and references. References should be publications which are readily available.
- f. <u>Administrative Instructions</u>. Administrative instructions provide the trainer/instructor with special circumstances relating to the ITS such as safety, real world limitations, and knowledge or enrichment topics which may be a prerequisite to successful accomplishment of the ITS.

ENCLOSURE (1)

ITS MANAGEMENT

1. ITS Use

- a. ITS's are the basis for all individual training in units and formal schools. Since ITS's are written for every MOS they specify every proficiency Marines are required to achieve as individuals in support of their unit combat missions.
- b. ITS's provide measures of performance that must be used by unit commanders to both diagnose individual deficiencies and to evaluate training. Deficiencies should be recorded and scheduled on future training plans. ITS's which are mastered should be recorded in individual training records and scheduled for sustainment/refresher training in the future.
- c. Institution commanders are responsible for providing instruction based on ITS's. These selected ITS's appear as tasks on item number 24 of the Course Descriptive Data. Using the SAT process, institutional commanders formulate programs of instruction (POI) which fulfill the requirements of the operating forces.
- d. Unit and institution commanders must work in tandem so that individuals continue to receive instruction until mandated proficiencies are achieved. Individual training cannot and should not cease upon graduation from a formal school. Schools do not have the resources (people, time, money) to teach every ITS required for MOS proficiency. Unit commanders must recognize this and continue individual training. When Marines do achieve proficiencies, unit commanders must systematically record these proficiencies and establish periodic sustainment training according to the frequency set forth in enclosure (3).

2. <u>ITS Maintenance</u>

- a. ITS's exist because of the threat. Changes which occur must be reflected in ITS's as a team effort of the formal schools, the operating forces, and staff agencies at Headquarters, U.S. Marine Corps and at the Marine Corps Combat Development Command. Changes in the threat, new weapons/equipment and doctrine will require new or updated training proficiencies.
- b. ITS's are validated when they are used by institution and unit commanders. Changes can be initiated by units, institutions, or higher headquarters. To ensure quality training, ITS's must be updated continuously. Input will be systematically collected, staffed, and incorporated into ITS's at least annually.

- c. ITS users should be critical of the ITS's as a whole as they support or fail to support a particular MOS.
- d. Specific components of an ITS should also be examined for realism and pertinence.
- e. ITS Management is dynamic. User maintenance is the key to refining proficiencies which best serve unit missions.

ENCLOSURE (2)

INDEX OF TASKS BY TRAINING LOCATION, LEVEL OF TRAINING, SUSTAINMENT, AND GRADE TO STANDARD

- 1. This enclosure identifies where ITS's are taught, training location; the level of training regarding proficiency, "P" for preliminary, not to standard, and "S" for trained to standard; and the lowest grade required to demonstrate proficiency in each ITS.
- 2. The training location is either Formal School (FS) or MOJT.
- 3. Sustainment training is always the responsibility of the unit commander. The number in the MOJT column represents the number of months between evaluation or retraining to maintain the proficiency required by the standard.
- 4. MOS 8631 TRSS Maintainer is a Secondary MOS for MOS 2800 Data/Communications Maintenance. Therefore ITSs for MOS 8631 include all MOS 2800 ITSs.

TASK NUMBER	TASK	FS	MOJT SUST	Grade
	MOS 8631, TRSS MAINTAINER			
8631.1.1	PLAN SENSOR MAINTENANCE SUPPORT		S/12	SGT
8631.1.2	DETERMINE FISCAL REQUIREMENTS FO TRSS MAINTENANCE SUPPORT	R	S/12	GYSGT
8631.2.1	PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF TACTICAL REMOTE SENSOR SYSTEM EQUIPMENT	S	S/12	LCPL
8631.2.2	PROVIDE TECHNICAL ASSISTANCE DURING OPERATION OF ORGANIC REMOTE SENSOR EQUIPMENT	S	S/12	LCPL
8631.3.1	PERFORM LIMITED TECHNICAL INSPECTION (LTI)	P	S/12	LCPL
8631.3.2	PERFORM PREVENTIVE MAINTENANCE O ORGANIZATIONAL MAINTENANCE EQUIPMENT	N	S/12	LCPL
8631.3.3	PERFORM ROUTINE CORRECTIVE MAINTENANCE ON TRSS EQUIPMENT	S	S/12	LCPL
8631.4.1	MAINTAIN SUPPLY SUPPORT		S/12	SSGT

TASK NUMBER	TASK	FS	MOJT SUST	Grade
8631.4.2			S/12	SSGT
8631.4.3	PREPARE EQUIPMENT FOR EMBARKATIO	P N	S/12	LCPL
8631.4.4			S/12	GYSGT
8631.4.5	MANAGE NON-CONTROLLED UNSERVICEABLE PROPERTY		S/12	GYSGT
8631.5.1	CONDUCT SKILL PROGRESSION TRAINING FOR MAINTENANCE PERSONNEL		S/12	SGT
8631.5.2	MANAGE MAINTENANCE TRAINING PROGRAM FOR SENSOR CONTROL AND MANAGEMENT PLATOON		S/12	SSGT

ENCLOSURE (3)

COMMON ITS LISTING

- 1. <u>General</u>. This enclosure provides a cross reference of ITS's common to more than one MOS within OccFld 8631. It is designed to assist the trainer in consolidating training for common tasks. Essential subjects ITS's are not listed since all Marines, regardless of MOS or grade, must be able to achieve the standard for those tasks.
- 2. <u>Format</u>. The enclosure lists the Task Title for each common task within the OccFld. Common Task Numbers follow each Task Title.

TASK NUMBER EXAMPLE: 8631.1.1

- o 8631 refers to the applicable Tactical Remote Sensor System (TRSS) Maintainer.
- o .1 refers to the Duty Area within the MOS; in this case, "Tactical Remote Sensor System (TRSS) Operations."
- o .1 refers to the Task; in this case, "Operate Organic Phase V Tactical Remote Sensor System (TRSS) Equipment."

TASK TITLE

COMMON TASK NUMBERS

ENCLOSURE (4)

TRAINING SUPPORT

1. This enclosure identifies training support in four categories for each MOS or the OccFld as a whole. Some of the support items are identified by tasks, groups of tasks, or for the entire task list as follows:

Appendix A: Training Devices, Simulators, and Training Aids

Appendix B: Training Equipment

Appendix C: Ammunition, Explosives, and Pyrotechnics

Appendix D: Training Materials

ENCLOSURE (5)

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TRAINING DEVICES, SIMULATORS, AND TRAINING AIDS

Audio visual aids (overhead projectors, and slide projectors).

Easel board and flip charts.

Maintenance forms.

Administrative supplies (i.e. grease pencils, tags, log books).

CBT - Computer Based Training Simulator.

TRAINING EQUIPMENT

<u>Vehicles</u>

None

<u>Unattended Ground Sensors</u>

Seismic Intrusion Detector (SID)
Magnetic Intrusion Detector (MAGID)
Infrared Intrusion Detector (IRID)
Day/Night Thermal Imager (IMAGER)
Air Delivered Seismic Intrusion Detector (ADSID)
Encoder Transmitter Unit (ETU)
Encoder Transmitter Unit/Seismic Intrusion Detector (ETU/SID)
ETU/SID Lithium Battery Box
Sensor Cable

Relay Equipment

Relay Unit Relay Unit Battery Box Relay Antenna and Accessory Pack UHF Unit All Aerial Platform Hardware

Monitoring Equipment

Sensor Monitor System, AN/USQ-126
Sensor Monitor System Antenna Group
Signal Data Recorder, RO-630/USQ
Printer
Monitor
Recovery Unit
Signal Data Recorder Remote Kit
Shelter Assembly
Communications Group
Portable Monitor, AN/USQ-121

Test Set, Tactical Remote Sensor System, TS-4458/GSQ

Intelligent Communications Controller
Reception Indicator
Radio Frequency Tuning Box
Computer Unit
Printer
AC/DC Converter
Attenuator Assembly
RF Tuning Kit

General Purpose Test Equipment

* See current addition of TM 10510-14/1 for deviation guidance.

Signal Generator, HP 8640

Spectrum Analyzer, HP 8568-F44 Logic Analyzer, LA-32A Counter, Frequency 1922/04E/55 Oscilloscope, Digital TEK 2430A Generator, Function HP 8116A/001 Signal Generator HP 8643A Monitor Unit, TS 4161 Ohmmeter, EARTH Oscilloscope, Analog, HP 2246A (MOD A) Test SET, Radio TS-4317/114B Test SET, Distortion TEK AA501 W/SG-505 Tool Kit, Electronic 270067 MK-2569/P Power Supply, HP 6289A Power Supply, HP 6274B Meter, Power HP 435B Multimeter, FLUKE 8025B Sensor, Power HP 8482A Test Set, Semi-conductor 2000A Battery Tester TS-183A/U Table, Electronic Maintenance Attenuator Set HP 11582A CN-1461/L Tool Kit, Linemans TE-33 Adapter Set, Connector MK-XXX/U Indicator, Phase Sequence AMMeter, Clamp-on, Weston Model 749 Electronic Filter, Krohn-Hite 3550

Test Fixtures and Cables

Antenna Coupler Test Box DC Block Breakout Box Preamplifier Test Assembly Voltage Protector Voltage Protector to Relay Unit Cable Auxiliary Receptacle Test Box UGSS Test Box Reception Indicator Test Cable Extender Cable Portable Monitor Test Adapter Cable RF Set Data Bus Cable -1 RF Set Data Bus Cable -2 RF Set Interface Cable Auxiliary Port Cable ETU/SID Test Cable

Training Materials

Technical Manuals for TRSS Equipment

Miscellaneous

782 Gear

Batteries; as applicable

Bus Bars Cable Plow

Camouflage Equipment

Chainsaw

Compass, Lensatic

Coordinate Scale and Protractor

Electrical Tape Electrical Wire

Embarkation Equipment

Engineer Tape

Environmental Control Units

Field Cable Field Wire

Fire Extinguishers

Fuel (Oil/Gas)

Generators; as applicable

Ground Stakes Light Bulbs

Military map 1:50,000 Scale

Mole Boring Machine

Overlay Paper

Ruler

Sandbags

Scissors

String/Rope

Tool Boxes; as applicable Tool Kits; as applicable

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AMMUNITION, EXPLOSIVES, AND PYROTECHNICS

TASK DODIC NOMENCLATURE PROFICIENCY ITERATION SUSTAINMENT

(THIS ENCLOSURE IS NOT APPLICABLE)

Appendix C to ENCLOSURE (5)

5-C-1

TRAINING MATERIALS

Appropriate Unit SOP 8631.4.3

Appropriate MCO'S in 1510 series 8631.5.2

Appropriate SL-3'S Major Components of end items 8631.3.3 8631.4.3

Appropriate SL-4'S Repair parts for end items 8631.3.3

Appropriate Technical Manuals 8631.2.2

Appropriate Technical Publications 8631.1.1 8631.2.1 8631.3.1 8631.3.3 8631.5.1 8631.5.2

FM 24-20 Tactical Wire and Cable Techniques 8631.5.1

FMFM 0-1 Unit Training Management Guide 8631.5.1

FMFM 3-1, Command and Staff Action 8631.1.1

FMFM 3-30 Communications 8631.5.1 8631.5.2

FMFM 3-36 Guide to Electromagnetic Interference Control 8631.5.1

FMFRP 0-1A How to Conduct Training 8631.5.1

Guidance from Comptroller 8631.1.2

Maintenance Float Catalog 8631.3.3

Master Equipment File 8631.3.3

Master Header Information File (SASSY/MHIF)
8631.3.3

MCO 4400.82 MIMMS Controlled Item Management Manual 8631.4.2

MCO 4400.82 Regulated/Controlled Items Management Manual 8631.3.1

MCO 4400.84 Special Programs Manual 8631.4.4

MCO P1200.7 MOS Manual 8631.5.2

MCO P1500.40 Marine Corps Training Philosophy and Requirements 8631.5.2

MCO P4400.124 FMF SASSY Using Unit Procedures 8631.4.5

MCO P4400.150 Consumer Level Supply Policy Manual 8631.4.1 8631.4.2

MCO P4400.82 Regulated/Controlled Items Management Manual 8631.4.5 8631.4.4

MCO P4750.3 Painting Camouflage Pattern, Painting Registration Marking and Identification of Marine Corps Tactical Equipment 8631.4.3

MCO P4790.2 MIMMS Field Procedures Manual 8631.3.1 8631.3.2 8631.4.1 8631.4.2 8631.1.1 8631.3.3

MCO P7000.1 Financial Management Manual 8631.1.2

MI Standards File 8631.3.3

Standard Accounting Budget Review System 8631.1.2

Sensor Operator's Handbook 8631.2.2

SL 1-2 Publications Authorized to Stock USMC 8631.3.2 8631.3.3

SL 6-1/2 Applications List of Items and Components 8631.3.3

Software User's Manual 8631.2.2

Supporting Unit MMO SOP 8631.4.2

TM 4700-15/1 Equipment Record Procedures 8631.3.3

TM 9406-15 Grounding Procedures 8631.2.1 8631.2.2 8631.5.1 8631.5.2

TM 9999-15/2 Electrostatic Discharge (ESD) Management 8631.5.1 8631.5.2

UM 4400-125 FMF SASSY Accounting Manual (VOL IV)
Maintenance Float Procedures
8631.4.2

UM 4790-5 MIMMS (AIS) FMSS 8631.3.3 8631.4.1 8631.4.2

Unit Float SOP 8631.4.2

Unit Maintenance Float SOP 8631.4.4 8631.4.5

Unit MMO SOP

8631.4.1 8631.4.2 8631.4.4 8631.4.5

Unit Supply SOP

8631.4.1 8631.4.4 8631.4.5

Unit T/E (CMR)

8631.1.1 8631.3.1 8631.4.3

Unit T/O 8631.1.1

INDIVIDUAL TRAINING STANDARDS FOR TACTICAL REMOTE SENSOR SYSTEM (TRSS) MAINTAINER, MILITARY OCCUPATIONAL SPECIALTY (MOS) 8631

MOS 8631, TRSS MAINTAINER

DUTY AREA 1	- MAINTENANCE SUPPORT PLANNING	
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TASK 8631	1.2	4-2
DUTY AREA 2	- MAINTENANCE OPERATIONS	
TASK 8631	2.1	7 −3
TACK 0621	INSTALLATION OF TACTICAL REMOTE SENSOR SYSTEM EQUIPMENT 2.2 6-4	n 1
IASK 0031	PROVIDE TECHNICAL ASSISTANCE DURING OPERATION OF ORGANIC REMOTE SENSOR EQUIPMENT	4-4
•	- MAINTENANCE ACTIONS	
TASK 8631	3.1	\-4
TASK 8631	3.2	4-5
TASK 8631	3.3	 4−6
DUTY AREA 4	- LOGISTICS SUPPORT	
TASK 8631	4.1	7-8
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	4.4	
TASK 8631	4.5	-12
DUTY AREA 5	- MAINTENANCE TRAINING	
TASK 8631	5.1	-12

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ENCLOSURE (6)

MOS 8631, TRSS MAINTAINER

<u>DUTY AREA 1 - MAINTENANCE SUPPORT PLANNING</u>

TASK: 8631.1.1 PLAN SENSOR MAINTENANCE SUPPORT

 $\underline{\text{CONDITION(S):}}$ Provided a mission, equipment, personnel, Commander's guidance and references.

<u>STANDARD:</u> Plan sensor maintenance support required per the mission, Commander's guidance, and references.

PERFORMANCE STEPS:

- 1. Determine unit capabilities.
- 2. Determine unit requirements.
- 3. Determine locations of supported equipment.
- 4. Determine supply support required.
- 5. Determine maintenance float support required.
- 6. Determine logistics support required.
 - a. Fuel
 - b. Generators
 - c. Transportation
- 7. Determine personnel shortages.
- 8. Determine facilities required.
 - a. Tents
 - b. Heating/cooling/ventilation
- 9. Determine security required.
- 10. Draft the plan.
- 11. Submit the plan for review/approval.
- 12. Determine equipment readiness.

- 1. UNIT T/E (CMR)
- 2. UNIT T/O
- 3. FMFM 3-1, Command and Staff Action
- 4. MCO P4790.2 MIMMS Field Procedures Manual
- 5. Appropriate Technical Publications

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 8631.1.2 DETERMINE FISCAL REQUIREMENTS FOR TRSS MAINTENANCE SUPPORT

 $\underline{\text{CONDITION}(S)}$: Provided a maintenance facility, personnel, unit T/O and T/E, a mission, Commander's guidance and references.

<u>STANDARD:</u> Utilizing past expenditures, plans for future operations, logistic commitments and new equipment receipts, express fiscal requirements to the Commanding Officer.

PERFORMANCE STEPS:

- 1. Review:
 - a. Historical fiscal data.
 - b. Training Exercise Employment Plan (TEEP).
 - c. Logistics requirements.
 - d. New equipment receipts.
 - e. Unconventional contractor maintenance requirements (e.g. LST-5 contractor maintenance).
 - f. TAD requirements for specialized technical training.
- 2. Based upon the review, document requirements.
- 3. Submit the budget for review/approval.

REFERENCE(S):

1. Guidance from Comptroller

- 2. Standard Accounting Budget Review System
- 3. MCO P7000.1 Financial Management Manual

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

<u>DUTY AREA 2 - MAINTENANCE OPERATIONS</u>

TASK: 8631.2.1 PROVIDE TECHNICAL ASSISTANCE DURING THE INSTALLATION OF TACTICAL REMOTE SENSOR SYSTEM EQUIPMENT

<u>CONDITION(S):</u> Provided a mission, equipment, and references.

 $\underline{\text{STANDARD:}}$ Verify that the TRSS equipment is installed and functions correctly in the manner required to meet mission requirements per reference.

PERFORMANCE STEPS:

- 1. Verify power source.
- 2. Verify antenna installation as required.
- 3. Verify remote capabilities as required.
- 4. Verify equipment operation.
- 5. Verify proper grounding procedures.
- 6. Verify equipment operating procedures when required.
- 7. Perform EMI troubleshooting to include checking for proper grounds, cable connections, power connections, etc.
- 8. Provide guidance to correct any discrepancies noted during the performance of above steps.

REFERENCE(S):

- 1. Appropriate Technical Publications
- 2. TM 9406-15 Grounding Procedures

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

TASK: 8631.2.2 PROVIDE TECHNICAL ASSISTANCE DURING OPERATION OF ORGANIC REMOTE SENSOR EQUIPMENT

CONDITION(S):
Provided a mission, equipment, and references.

 ${
m \underline{STANDARD:}}$ Verify TRSS is functioning correctly per applicable references.

PERFORMANCE STEPS:

- 1. Verify system integrity as required.
- 2. Isolate faults as required.
- 3. Perform immediate corrective actions to re-establish operations.

REFERENCE(S):

- 1. Sensor Operator's Handbook
- 2. Software User's Manual
- 3. Appropriate Technical Manuals
- 4. TM 9406-15 Grounding Procedures

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

<u>DUTY AREA 3 - MAINTENANCE ACTIONS</u>

TASK: 8631.3.1 PERFORM LIMITED TECHNICAL INSPECTION (LTI)

 $\underline{\text{CONDITION(S):}}$ Provided suspect items of equipment and references.

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m \underline{STANDARD:}}$ Perform a Limited Technical Inspection (LTI) per the references.

PERFORMANCE STEPS:

1. Develop an LTI checklist.

- 2. Verify applicable modifications.
- 3. Inspect the equipment.
- 4. Complete the checklist.
- 5. Report the results.

- 1. MCO P4790.2 MIMMS Field Procedures Manual
- 2. MCO 4400.82 Regulated/Controlled Items Management Manual
- 3. Unit T/E (CMR)
- 4. Appropriate Technical Publications

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

TASK: 8631.3.2 PERFORM PREVENTIVE MAINTENANCE ON ORGANIZATIONAL MAINTENANCE EQUIPMENT

 $\underline{\text{CONDITION}(S)}$: Provided designated equipment, cleaning materials and the references.

<u>STANDARD:</u> Equipment must be free of dirt, debris, rust, and corrosion; fully operational or discrepancies noted for repair.

PERFORMANCE STEPS:

- 1. Perform FITCAL;
 - a. FEEL the equipment for any broken or loose parts.
 - b. INSPECT the equipment visually for any broken, loose, or dirty parts.
 - c. TIGHTEN any loose parts found.
 - d. CLEAN any dirty parts noted.
 - e. ADJUST any equipment that needs it for proper operation.
 - f. LUBRICATE cables, wires, or any other equipment as necessary.

- 2. Conduct operational check of all capabilities.
- 3. Conduct inventory with SL-3 or appropriate stocklist.
- 4. Complete equipment records.
- 5. Report discrepancies.

- 1. MCO P4790.2 MIMMS Field Procedures Manual
- 2. SL 1-2 Publications Authorized to Stock USMC

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

TASK: 8631.3.3 PERFORM ROUTINE CORRECTIVE MAINTENANCE ON TRSS EQUIPMENT

 $\underline{\text{CONDITION}(S)}$: Provided designated faulty equipment, assigned maintenance area, applicable technical references, proper tools, TMDE and other manuals, directives, and references.

<u>STANDARD:</u> Perform corrective maintenance on faulty TRSS equipment to return the equipment to a fully operational status per the references.

PERFORMANCE STEPS:

- 1. Adhere to safety requirements.
- 2. Read schematic diagrams.
- 3. Calculate circuit parameters.
- 4. Measure basic circuit performance.
- 5. Ensure proper handling of static sensitive components/printed circuit cards.
- 6. Perform alignments.
- 7. Trace signal paths.
- 8. Fabricate test fixtures.
- 9. Identify faulty component.

- 10. Requisition repair parts.
- 11. Remove/replace faulty component (utilize soldering skills where applicable).
- 12. Track appropriate changes on Equipment Repair Order (ERO).
- 13. Research authorized Modification and Technical Instructions (MI & TI).
- 14. Perform maintenance closeout procedures to include quality assurance check.

- 1. TM 4700-15/1 Equipment Record Procedures
- 2. UM 4790-5 MIMMS (AIS) FMSS
- 3. MCO P4790.2 MIMMS Field Procedure Manual
- 4. SL 1-2 Publications Authorized to Stock USMC
- 5. Appropriate SL-3'S Major Components OF End Items
- 6. Appropriate SL-4'S REPAIR PARTS FOR End Items
- 7. SL 6-1/2 Applications List of Items and Components
- 8. Master Header Information File (SASSY/MHIF)
- 9. Maintenance Float CATALOG
- 10. MI Standards File
- 11. Master Equipment File
- 12. Appropriate Technical Publications

ADMINISTRATIVE INSTRUCTIONS:

- This task applies to the following equipment for this MOS;
 - a. UGSS GSQ-257
 - b. PM AN/USQ-121
 - c. RA RE-1162/U

- d. SMS AN/USQ-126
- e. SMMS AN/MSC-77
- f. Test Set TS4458/GSQ

<u>DUTY AREA 4 - LOGISTICS SUPPORT</u>

TASK: 8631.4.1 MAINTAIN SUPPLY SUPPORT

 $\underline{\text{CONDITION(S):}}$ Provided the requirement, Commander's guidance and references.

 $\underline{\text{STANDARD:}}$ Ensure supply requirements are identified, promptly processed and applied to the correct item per MCO P4790.2B MIMMS Field Procedures Manual, Appendix C.

PERFORMANCE STEPS:

- 1. Establish policy for new equipment support.
- 2. Determine support maintenance requirements and repair parts support.
- 3. Identify maintenance and repair funding requirements.
- 4. Ensure reports and records are accurate and complete.

REFERENCE(S):

- 1. MCO P4790.2 MIMMS Field Procedures Manual
- 2. Unit MMO SOP
- 3. Unit Supply SOP
- 4. UM 4790-5 MIMMS (AIS) FMSS
- 5. MCO P4400.150 Consumer Level Supply Policy Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 8631.4.2 MAINTAIN MAINTENANCE FLOAT SUPPORT

 $\underline{\text{CONDITION(S):}}$ Provided faulty secondary repairables and references.

<u>STANDARD:</u> Ensure maintenance float assets are correctly requisitioned, accounted for, receipted for, and controlled.

PERFORMANCE STEPS:

- 1. Validate requirements.
- 2. Requisition secondary repairables.
- 3. Reconcile outstanding requirements.
- 4. Submit recommendations for annual maintenance float computation (this step only done in special cases, usually with critical low density equipment).
- 5. Supervise control of secondary repairables.

REFERENCE(S):

- 1. MCO P4790.2 MIMMS Field Procedures Manual
- 2. MCO 4400.82 MIMMS Controlled Item Management Manual
- 3. MCO P4400.150 Consumer Level Supply Policy Manual
- 4. UM 4790-5 MIMMS (AIS) FMSS
- 5. UM 4400-125 FMF SASSY Accounting Manual (VOL IV)
 Maintenance Float Procedures
- 6. Unit MMO SOP
- 7. Unit Float SOP
- 8. Supporting Unit MMO SOP

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

TASK: 8631.4.3 PREPARE EQUIPMENT FOR EMBARKATION

 $\underline{\text{CONDITION}(S):}$ Provided equipment, personnel, a mission, and references.

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STANDARD: Ensure equipment is prepare for embarkation per the references.

PERFORMANCE STEPS:

- 1. Inspect SL-3 completeness of maintenance/maintenance support equipment.
- 2. Determine requirements for embarkation materials, boxes, strapping, etc..
- 3. Inspect tactical marking of maintenance/maintenance support equipment.
- 4. Inspect packing and embark lists upon completion.
- 5. Inspect weather/water proofing of maintenance/maintenance support equipment.
- 6. Determine special lifting/handling requirements for maintenance/maintenance support equipment.
- 7. Determine special security requirements for maintenance/maintenance support equipment.
- 8. Maintain desktop Procedures.

REFERENCE(S):

- 1. MCO P4750.3 Painting Camouflage Pattern, Painting Registration Marking and Identification of Marine Corps Tactical Equipment
- 2. Unit T/E (CMR)
- 3. Appropriate Unit SOP
- 4. Appropriate SL-3'S Major Components of End Items

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

TASK: 8631.4.4 MAINTAIN RECOVERABLE ITEMS PROGRAM (WIR)

CONDITION(S): Provided faulty equipment and references.

STANDARD: Maintain program per the references.

PERFORMANCE STEPS:

- 1. Determine repair cost.
- 2. Determine maintenance echelon.
- 3. Determine auto-evac.
- 4. Determine maintenance cycle time.
- 5. Submit WIR.
- 6. Route copy of WIR to using Unit.
- 7. Await WIR disposition.
- 8. Comply with WIR instruction.
- 9. Complete ERO and MIMMS/SASSY close.

REFERENCE(S):

- 1. Unit MMO SOP
- 2. Unit Supply SOP
- 3. Unit Maintenance Float SOP
- 4. MCO P4400.82 Regulated/Controlled Items Management Manual
- 5. MCO 4400.84 Special Programs Manual

ADMINISTRATIVE INSTRUCTIONS: (NONE)

TASK: 8631.4.5 MANAGE NON-CONTROLLED UNSERVICEABLE PROPERTY

<u>CONDITION(S):</u> Provided unserviceable property and reference.

<u>STANDARD:</u> Determine action required to deal with non-controlled unserviceable property per the references.

PERFORMANCE STEPS:

- 1. Determine condition code of equipment.
- 2. Determine whether equipment repair exceeds maintenance capability.

- Determine whether equipment repair costs exceed 65% of item cost.
- 4. Determine whether "Source/Maintenance/Recoverability (SMR) Code authorizes the Unit to submit a WIR.
- 5. Prepare WIR.
- 6. Determine whether within authorized echelon of maintenance to wash out the item of equipment. Route copy of WIR to using Unit.
- 7. Generate letter of unserviceable non-controlled property.
- 8. Close out maintenance actions.

- 1. Unit MMO SOP
- 2. Unit Supply SOP
- 3. Unit Maintenance Float SOP
- 4. MCO P4400-124 FMF SASSY Using Unit Procedures
- 5. MCO P4400.82 Regulated/Controlled Items Management Manual

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

<u>DUTY AREA 5 - MAINTENANCE TRAINING</u>

TASK: 8631.5.1 CONDUCT SKILL PROGRESSION TRAINING FOR MAINTENANCE PERSONNEL

 $\underline{\text{CONDITION(S):}}$ Provided Commander's guidance, unit training SOP, unit training schedule, assigned training topic, personnel to receive training, appropriate technical manuals, a training site and references.

STANDARD: Conduct operator, technical and supervisor training for all maintenance and equipment related MOS's within the unit per the unit training plan.

PERFORMANCE STEPS:

- 1. Review unit training plan.
- 2. Gather reference materials.
- 3. Study reference materials.
- 4. Develop training outline.
 - a. Determine tasks to be trained.
 - b. Determine sequence of tasks.
 - c. Determine time/space constraints.
 - d. Determine requirements/availability of assistants.
 - e. Determine resources required.
- 5. Rehearse presentation.
- 6. Prepare training site.
- 7. Arrange for special requirements (e.g. shade, heat, etc.).
- 8. Rehearse and evaluate assistants (if any).
- 9. Present class.
- 10. Evaluate Marines' performance to ensure learning.
- 11. Record and report training completed.

REFERENCE(S):

- 1. FMFM 0-1 Unit Training Management Guide
- 2. FMFRP 0-1A How to Conduct Training
- 3. FMFM 3-30 Communications
- 4. FM 24-20 Tactical Wire and Cable Techniques
- 5. Appropriate Technical Publications
- 6. TM 9999-15/2 Electrostatic Discharge (ESD) Management
- 7. TM 9406-15 Grounding Procedures
- 8. FMFM 3-36 Guide TO Electromagnetic Interference Control

9. Unit Training Plan

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)

 ${\color{blue}{TASK:}}$ 8631.5.2 MANAGE MAINTENANCE TRAINING PROGRAM FOR SENSOR CONTROL AND MANAGEMENT PLATOON

 $\underline{\text{CONDITION}(S)}$: Provided unit training SOP, Alpha Roster, Unit T/E, Training records and references.

<u>STANDARD:</u> Achieve a broad base of skill among communication personnel according to MOS requirements and unit cross training policy, using standardized methods and procedures.

PERFORMANCE STEPS:

- 1. Identify unit training policy.
- 2. Identify unit requirements.
- 3. Identify strengths and weaknesses of maintenance personnel.
- 4. Establish training priorities.
- 5. Devise training plan to increase skill level of personnel/unit.
 - a. Establish effective cross training plan.
 - b. Schedule job assignment rotation.
- 6. Determine type and frequency of training to be conducted on individual/unit basis.
- 7. Schedule participants and trainers.
- 8. Ensure supervision at all levels during conduct of training.
- 9. Evaluate skill levels attained against desired levels.
- 10. Revise plan according to evaluation.

REFERENCE(S):

1. MCO P1500.40 Marine Corps Training Philosophy and Requirements

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- 2. MCO P1200.7 MOS Manual
- 3. FMFM 3-30 Communications
- 4. TM 9999-15/2 Electrostatic Discharge (ESD) Management
- 5. TM 9406-15 Grounding Procedures
- 6. Appropriate Technical Publications
- 7. Appropriate MCO'S IN 1510 Series

<u>ADMINISTRATIVE INSTRUCTIONS:</u> (NONE)